

## REVIEWS.

### ART. XVI.—*Recent Works on Practice.*

1. *Lectures on the Principles and Practice of Medicine, delivered in Chicago Medical College.* By NATHAN SMITH DAVIS, A.M., M.D., LL.D., Dean of the Faculty, and Professor of Principles and Practice of Medicine. 8vo. pp. 896. Chicago: Jansen, McClurg & Co., 1884.
2. *A Text-book of Practical Medicine, designed for the use of Students and Practitioners of Medicine.* By ALFRED L. LOOMIS, M.D., LL.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York. 8vo. pp. 1102. 211 Illustrations. New York: Wm. Wood & Co., 1884.
3. *A Treatise on the Theory and Practice of Medicine.* By JOHN SYER BRISTOWE, M.D., LL.D., F.R.S., Fellow of the Royal College of Physicians; Senior Physician and Lecturer on Medicine at St. Thomas's Hospital, London. 8vo. pp. 1240. Fifth edition. London: Smith, Elder & Co., 1884.

In a review, written in 1881, we remarked upon the paucity of American text-books of medicine, and upon the modesty of the sixty-five professors of "Theory and Practice," who for nearly twenty years had left the field in possession of foreign authors, with whom Wood and Flint alone competed. The example set by Dr. Bartholow, in 1881, was soon followed by Dr. Palmer, of Michigan; and now we have placed at the head of the list two new candidates for professional favor, which we propose to introduce to our readers.

1. One of the motives, and we may suppose the chief one, which has induced Dr. Davis, towards the close of his professional life, to give to the world this bulky volume, "was," as he says, "a desire to place on record those views and modes of practice developed in my own mind as a result of fifty years' constant devotion to the study and practice of the healing art." Another motive, which he mentions, will be less appreciated, viz., "to place within reach of medical students a work on practice which embodies in its text the metric system of weights and measures." Fortunately, to prevent embarrassment, the equivalents in the old system are given.

The work consists of ninety-two lectures, embracing substantially the course which Dr. Davis has been in the habit of giving in the Chicago Medical College, and prepared for publication, from stenographic reports, but in part rewritten, and all fully revised.

The first five lectures, upon the general principles of medicine, illustrate the difficulty a teacher has in escaping from the bonds in which a routine course, delivered year after year, tends to inclose him. They bear the impress of the thoughts and professional opinions of thirty years ago—at which time, very possibly, the framework was put together—

and though modernized in many respects, one is constantly reminded, in their perusal of those fine old works on Principles by Billings, Williams, and Simon. In Lecture VI., under classification, we are given a truly extraordinary arrangement of diseases. The two great divisions are made into General and Local affections, and the latter are divided into four sub-classes, Inflammation, Fluxes, Neuroses, and Miscellaneous. The term "fluxes" is stated to be not free from criticism; but it is made to do good service, and under it we find the motley group of diaphoresis (cutaneous flux), serous diarrhoea, epidemic and sporadic cholera, dropsies, and hemorrhages. The miscellaneous sub-class is an *olla podrida* of spasmodic asthma, aphonia, diabetes, angina pectoris, parasites, etc. And yet Dr. Davis naïvely enough remarks, in objecting to etiological or anatomical methods of classification, that they "lead to the grouping together of diseases the most dissimilar in their nature!"

To understand Dr. Davis's views on fever we must observe that he recognizes two inherent elementary properties of living matter, one which gives it the capacity to receive impressions, *susceptibility*, the other, *vital affinity*, causes the atomic changes, which result from the impression, to follow certain laws. Fever is not caused primarily by alteration of the blood or a depression of the nervous or other processes, but "consists in the action of some cause capable of disturbing the general elementary properties common to all the organized structures," *i. e.*, the susceptibility and vital affinity. Thus in the fever of pure excitement, febricula, both of these primary endowments of the living tissues are increased, whereas, in the typhoid group they are diminished; on the other hand, in the periodical group, sensibility is increased, and vital affinity impaired; and again, in the eruptive group of fevers, the sensibility is increased, and the vital affinity perverted.

The subject of typhoid fever is very fully discussed, and the author is strongly in favor of the view that it may arise spontaneously, holding that it may originate, first, in any dwellings in which, from over-crowding or ill-ventilation, the air, furniture, and walls of the rooms become impregnated with organic emanations; second, from the percolation through the soil, from drains or privies, of fecal and urinary matters; and, third, it may even occur in an individual without communication with other cases or sources of infection, originating from causes "such as protracted mental depression and anxiety, excessive mental and physical work, and abrupt changes from out-door to passive in-door work." Under such circumstances it is possible that there may be modifications in the processes of disintegration of living structures, evolving septic or other poisonous material, which, returned into the blood, produce febrile disturbance of the same character as when an organic poison is received from without. That the evidence for a specific typhoid germ has no existence except in the human imagination is the burden of the lecture on etiology, and a great many interesting facts are adduced against the more popular and prevalent theory.

Dr. Davis has been very successful in his treatment of the disease. Of 520 cases treated by him in the Mercy Hospital, from 1850 to 1880, only 1 in 16, or 6.2 per cent. died—a very low mortality for a general hospital. He attaches less importance to the temperature than other writers, and believes that the conditions of the kidneys, abdominal viscera, and lungs offer more reliable guides in prognosis. In his remarks upon treatment there is much of interest. In cachectic and depressed conditions of the

system he has found more benefit from the use of small doses of the bichloride of mercury with cinchona than from all the preparations of iron, cod-liver oil, and alcoholic stimulants. In typhoid its use is limited to the early stage.

The use of calomel for its specific curative effect in typhoid, revived of late in Germany, he has seen in many cases, and it was thoroughly tried and found wanting by the physicians of the South and West from 1835 to 1850. Dr. Davis is an unsparing opponent of the use of alcohol in the disease, believing that it increases the impairment of nerve force, lessens the interchange of carbonic acid gas and oxygen, and thereby favors the congestion in the lungs and other organs, and the fatty degeneration of the heart. Several very interesting cases are given illustrating his change of opinion on these questions. In the prostration and low delirium he relies upon careful feeding and the use of strychnia and nitric acid.

The lecture on yellow fever gives a full and clear statement of our knowledge of this affection, and the labors of the Southern profession are acknowledged and utilized.

In speaking of the history of epidemics of erysipelas in the country Dr. Davis is able to confirm, from personal observation, the truth of the statement, that the epidemic of 1841-46 was true erysipelas, and not "an acute infectious disease closely allied to diphtheria," as supposed by Hirsch and Zuelzer.

The important subject of the periodical fevers is discussed in three lectures. In the severe, congestive types the author strongly urges the use of the cold douche for the purpose of establishing a reaction. The author does not think that there is a distinct typho-malarial fever, but simply an intermingling of the symptoms and pathological changes in patients dwelling in localities in which the causes of both continued and intermittent fevers are prevalent.

Under local affections, inflammation is first considered, and here the author's two elementary properties of the tissues do good service in the analysis of the phenomena. In the three forms—sthenic, asthenic, and specific—the susceptibility of structure is exalted, and the quantity of blood increased. In sthenic the vital affinity is increased, and the quality of the blood plastic; in the asthenic form it is just the reverse, while in the specific the vital affinity is perverted, and the quality of the blood toxæmic. The process is thus explained in a simple manner, but by making very free use of properties, upon the nature of which, we are told, it would be a waste of time to speculate. We are given a lamp with which everything shall be made clear and bright, but with neither oil nor wick nor match.

We turned with interest to the lectures on pneumonia to find things new and old, which Dr. Davis has brought out of his treasures of knowledge. He shows pretty clearly that the disease prevails more extensively in the Middle and Northern States than in the Southern, as held by Drake and some recent writers. The disease is regarded as an acute local inflammation, not a general febrile disease, and there is no evidence of a specific poison, organic or inorganic. Typhoidal and malarial influences as modifying the type are considered. A form of rheumatic pneumonia is also described, but on very insufficient grounds. In the case which is quoted in illustration, the man had during the attack severe and persistent pain in the chest, endocarditis developed, and he died in about two weeks. The presence of these symptoms, and the fact that the patient had had

occasional attacks of articular rheumatism, led to the opinion that he had "subacute rheumatic inflammation of the parenchyma of the lung; in other words, genuine rheumatic pneumonia." Gouty and syphilitic forms of the disease might readily be described on equally good grounds.

The author's experience in the treatment is instructive. When he began practice in a country district in 1837 he bled and gave tartar emetic, and found that the sthenic cases did well on this plan. In his early days in Chicago, when malaria was prevalent, quinine was most useful, and bleeding, except in rare cases, of no utility. In the heart failure, which he does not look upon as induced so much by the fever as by the defective oxygenation, he finds the stimulating effects of quinine, digitalis, and chlorate of potash, with coffee, the most valuable remedies which have succeeded in his hands when alcohol has failed.

Three forms of phthisis are recognized: tuberculous, pneumonic, and fibroid. The question of the contagiousness is not discussed, and the bacillus is believed to be only an accompaniment of the degenerative changes in the tubercular masses and without causative influence. Even its diagnostic value is doubted.

The lectures on the nervous system suffer from the system of classification which the author has adopted. Meningitis, cerebral and spinal sclerosis, come, early in the work, under local inflammations; while apoplexy, hemiplegia, paraplegia, chorea, etc. come late in the sub-class neuroses. The large amount of good work which has been done of late in this department, and which has rendered the study of nervous diseases so much more simple, has not been utilized to a sufficient extent.

Lectures 82 and 83 on insanity, while pleasant reading, are too discursive, and do not show an acquaintance with modern psychological medicine. They should be dropped from a subsequent edition, and the pages allotted to a specialist. It is difficult to understand the omission of the subject of general paresis, so important to the ordinary practitioner.

Dr. Davis's therapeutics are most consoling in these days of general scepticism. Art with him is everything; Nature as understood by Holmes and others "not merely a fanciful goddess, but a positive hindrance to the advancement of practical medicine." We have already given some illustration, but will briefly refer to one or two others. Mercury holds a high place in his estimation, if one may judge from the number of times its use is advised in various diseases. The index contains eighty-three references to its employment. In hard cancer some very remarkable statements are made of the power of the bichloride to arrest the growth when combined with a simple milk and vegetable diet. Except in cases of cancer of the stomach he has never seen this treatment fail to relieve the pain and check the growth. On the question of the use of alcohol Dr. Davis is clear and emphatic, and if his opinions prevail with the staff of the Mercy Hospital, the item of "wine and spirits" in the annual account must be very small. He holds that from first to last it acts as a *paralyzant* and anæsthetic, and is in no sense a stimulant. As a result of thirty-five years' clinical study of the effects of alcohol in all forms of low febrile diseases, he has never yet found an instance in which it increased the cardiac force or the efficiency of the circulation. Place this negative statement against the very positive assertions of so many other observers, and we have an illustration of how difficult it is to get at therapeutical truth, and how much must be allowed for the "personal equation" in the observer.

The work as a whole is strongly conservative in its tendencies; the younger men "whose apprehensive senses all but new things disdain" will call it old-fashioned, but they will find in its pages the ripe wisdom of a keen and conscientious observer who has arrived at conclusions after study and deliberation, conclusions from which at times we may differ, but which deserve our consideration and respect.

In one matter the work is the most distinctively American practice which we have. From his long connection with the American Medical Association and with American journalism, Dr. Davis has become thoroughly familiar with the good work done year after year by men who, far from the great centres, have placed their contributions in local Journals and the Transactions of State Societies, from the quiet solitudes of which he has in many instances gleaned most useful information, and the work abounds with references to the communications of men in every section of the country.

It has been said that the climate of Chicago is unfavorable to careful proof-reading. We do not wish to be too critical, but there are a *few* errors which spoil one's pleasure in reading. The proper names, particularly of foreigners, need revising. At p. 28 the average temperature of the body is given as 55° C. (78.6° F.). One of the most curious errors is at p. 843, where the words "*frematoid or fluted worms*" are used instead of trematoid worms or flukes.

The index is a striking example of how such a valuable adjunct to a book should not be prepared. It is largely an index of authors' names and therapeutic means. Thus, under the letter B, of fifty-three references, only three are to diseases, and under *brain*, only one reference is given, *inflammation of*. The fevers are all grouped under the word *fever*, without any other references to special forms.

2. The work of Dr. Loomis is in many respects a great contrast. It, too, is a revision and elaboration of the lectures on Medicine given at the University of New York, but we miss in it the special features which make Dr. Davis's lectures so valuable. We do not feel the author's personality so strongly, which is of course not to be expected; and the work is more like the general run of text-books on the subject, and in so being has more than compensating advantages as a manual for students. It is systematic; the lecture form has been obliterated; it is well arranged and fully illustrated.

An introduction of eight pages, on Inflammation, opens the work, and the diseases of the respiratory system are at once considered. Croup is regarded as a distinct disease, and the characteristic differences which are given certainly serve to distinguish it from diphtheria.

The prevalence of pneumonia is stated to increase from the pole to the equator, and is more common in the Southern than in the Northern States, an opinion which, as we noted, is opposed to Dr. Davis's observation and research. In the compass of a page a very strong case is put in favor of the view that it is an acute specific disease. In its treatment Dr. Loomis recommends, as the result of the past five years' experience, that the patient be brought under the full influence of opium, and held in a state of comparative comfort by repeated hypodermic injections. In this way the primary shock is well sustained, and the chance of heart failure is lessened. The relief and comfort which it gives are sufficient to commend its use. The drug should be stopped as soon as the infiltration is com-

pleted. For cardiac failure, alcohol is given the first place, and to reduce high temperature, quinine in doses from grs. x to xv is preferred to cold. In his treatment of the disease Dr. Loomis occupies a mid-position between Dr. Davis with his poly-pharmacy and Dr. Bristowe with "nature and nurse." It is most instructive to read the sections on the treatment of this disease in these three works. Dr. Bristowe, in a little more than a page full of qualifying phrases, such as, "may possibly," "probably," "perhaps," as regards drugs, gives most rational advice, and, while treating ordinary cases expectantly, he is in many quite prepared to supplement this plan by other measures. Alcohol he also regards as indispensable in certain cases.

In the treatment of empyema Dr. Loomis gives very clear warning against washing out the cavity, and his recent experience is very positively against it, having on three occasions had reason to believe that death followed the injection of weak carbolic acid solutions.

The author's position on the relation of the bacillus to tubercle is put as follows: "The presence of a distinct bacillus in connection with tubercle, and its absence in all other morbid conditions, are generally confirmed by the most competent observers. The etiological relation of this bacillus to phthisis rests solely on the demonstration of Koch. Observers are not wanting who deny entirely, not only the etiological relation, but even that this bacillus is confined to the tubercular tissues—but they fail to present satisfactory proof of such statements." The question of the contagiousness he holds is one to which clinical observation has given no conclusive answer. In the treatment of phthisis the author places great confidence in quinine, believing that no drug has equal power of arresting phthisical processes in the early stage.

In the section on Diseases of the Digestive System and Diseases of the Heart, we notice nothing for special comment; they are carefully prepared and well illustrated.

In the treatment of uræmia the use of morphia is strongly recommended to arrest the spasms, induce sweating, and facilitate the action of cathartics and diuretics. The arterio-capillary fibrosis of Gull and Sutton is recognized as a tolerably well-defined disease, characterized by hyaline-fibroid changes in the arterioles and atrophy of the adjacent tissues, and clinically by a state of high arterial tension. The vascular changes are primary, the renal and cardiac secondary.

Typhoid fever is regarded as a miasmatic contagious disease, the specific poison of which is in the fecal discharges, but is not active when these are fresh, requiring to undergo a development outside of the body, either in the excrement itself, or in soil saturated with it. In the treatment of the fever the cold bath is favorably spoken of, when employed with care and judgment. In the majority of cases the temperature can be kept below 103° by quinine, but there are some which require the cold bath as well. In such cases Dr. Loomis's rule is: after reducing the temperature to 101° or 102° F. by a cold bath, to administer an antipyretic dose of quinine, and thus delay the recurring rise. The whole subject of the treatment of this important disease and its complications is most carefully and judiciously considered.

In typhus fever the author speaks most strongly of the value of fresh air in neutralizing the poison, and advises the use of tents in every epidemic. He urges caution in the employment of alcohol, and gives an exceedingly interesting account of the fever tents of Blackwell's Island

in 1864, where the use of stimulants was reduced to a minimum, and yet the death-rate was only 1 in 16 against 1 in 5 at Bellevue Hospital.

Under the term "continued malarial fever," there is a very full account of the much-discussed "typho-malarial fever." It is believed to be the result of the presence in the body of malaria and a septic poison, and in its morbid anatomy and symptomatology is a combination of the two diseases. In cities where malaria prevails sewer-gases seem to furnish the septic element which is so essential for its development. We gather that Dr. Loomis does not believe that the septic element is actually the typhoid poison, although the intestinal lesions which he describes are almost identical with those of enteric fever.

The article on acute rheumatism is very brief; the complications are simply referred to, and the section on the whole is disappointing. The author has given up the use of the salicylates, believing that they cause depression of the heart, increase the liability to endocardial mischief, and promote relapses. He now gives carbonate of soda to neutralize the urine, and morphia hypodermically to relieve the pain.

The concluding section on Diseases of the Nervous System contains a brief, but good summary of all the more important affections.

The author has produced a clear, practical, and useful text-book, one which can be recommended to the student as a good companion in his hospital work, and to the busy practitioner as a safe guide in diagnosis and treatment. The illustrations are for the great part original, and well executed; the execution of some of the cuts is very good, of many others rather indifferent. The work is very free from typographical errors. There is one little mistake, due no doubt to a slip of the pen, and it reminds us of the remark of a student who had just come from a clinic of Sir William's, at University College Hospital, London. "Why!" said he, "Jenner is not such an old fellow after all. I thought vaccination was discovered years ago." Dr. Loomis has written *Sir William Jenner*, instead of *Edward*. The Gloucestershire physician had tardy public and professional, never court recognition, and his reputation is now, as his merit was then, above titular distinction.

3. Dr. Bristowe's work needs no words of commendation from us. The profession in Great Britain has endorsed its reputation by calling for five editions within seven years. The present differs from the fourth chiefly in the incorporation of recent views on infective organisms, and in a new introduction to the section on diseases of the heart. While to many an objection to this work is in the scanty details of treatment, yet there is much force in what the author says in the preface, that a man is more likely to make a thoughtful physician and benefit his patient by adapting drugs and methods to the exigencies of cases, than by following "the stereotyped procedure of some predecessor." He hesitates—many do not—to force his "own routine and trivialities of practice upon students," and contents himself with inculcating general principles, "and pointing out the specific virtues of certain drugs."

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